

What is claimed is:

1. An apparatus for moving particulate matter, comprising:
a body having a motor;
a drive housing disposed on the body;
5 a cavity disposed in the body, the cavity having a first side, a second side, and
at least a partial semi-circular cross-sectional shape;
a paddle assembly having a shaft and a plurality of paddles disposed
therefrom, each paddle having a bottom wall and a distal end, wherein the distal end
travels along the semi-circular cross-sectional shape of the cavity during operation,
10 and the bottom wall is sized and shaped to extend along a width of the paddle in a
substantially planar manner between the first side wall and the second side wall of the
cavity; and
a drive mechanism disposed in the drive housing, the drive mechanism
operatively connecting the motor and the shaft.
- 15 2. The apparatus for moving particulate matter of claim 1, wherein the
paddles each include a pair of side walls and an arcuate bottom wall extending
outwardly from the shaft first away from and then toward the direction of rotation of
the paddles.
- 20 3. The apparatus for moving particulate matter of claim 2, wherein the
side walls and arcuate bottom wall of each of the paddles define an open region
having a measurable volume for receiving and throwing grain to a desired location.
4. The apparatus for moving particulate matter of claim 1, wherein the
motor is an electric motor.
- 25 5. The apparatus for moving particulate matter of claim 1, further
including a chute disposed on the body for guiding the particulate matter in a
direction.
6. The apparatus for moving particulate matter of claim 1, wherein the
paddle assembly rotates between 350 rpm and 525 rpm.

7. The apparatus for moving particulate matter of claim 1, wherein the body is constructed from a plastic material.

8. The apparatus for moving particulate matter of claim 1, wherein the particulate matter is grain.

5 9. An apparatus for moving particulate matter, comprising:
a body having a motor;
a drive housing disposed on the body;
a cavity disposed in the body, the cavity having a first side, a second side, and
at least a partial semi-circular cross-sectional shape;
10 a paddle assembly having a shaft and a plurality of paddles disposed
therefrom, each paddle having an arcuate bottom wall extending outwardly from the
shaft first away from and then toward the direction of rotation of the paddles, a pair of
side walls, and a distal end, wherein the distal end travels along the semi-circular
cross-sectional shape of the cavity during operation; and
15 a drive mechanism disposed in the drive housing, the drive mechanism
operatively connecting the motor and the shaft.

10. The apparatus for moving particulate matter of claim 9, wherein the side walls and arcuate bottom wall of each of the paddles define an open region having a measurable volume for receiving and throwing grain to a desired location.

20 11. The apparatus for moving particulate matter of claim 9, wherein the motor is an electric motor.

12. The apparatus for moving particulate matter of claim 9, further including a chute disposed on the body for guiding the particulate matter in a direction.

25 13. The apparatus for moving particulate matter of claim 9, wherein the paddle assembly rotates between 350 rpm and 525 rpm.

14. The apparatus for moving particulate matter of claim 9, wherein the body is constructed from a plastic material.

15. The apparatus for moving particulate matter of claim 9, wherein the particulate matter is grain.

16. An apparatus for moving particulate matter, comprising:
a body having a motor;
5 a cavity disposed in the body, the cavity having a semi-circular cross-sectional shape;
a shaft disposed in the cavity;
a drive mechanism operatively connecting the motor and the shaft;
a drive housing disposed on the body, wherein the drive housing fully encloses
10 the drive mechanism, thereby preventing particulates from contaminating the drive mechanism; and
a plurality of paddles disposed on the shaft, each paddle having a bottom wall and a distal end, wherein the distal end travels along the semi-circular cross-sectional shape of the cavity during operation.

17. The apparatus for moving particulate matter of claim 16, wherein the paddles each include a pair of side walls and an arcuate bottom wall extending outwardly from the shaft first away from and then toward the direction of rotation of the paddles.

18. The apparatus for moving particulate matter of claim 17, wherein the side walls and arcuate bottom wall of each of the paddles define an open region
20 having a measurable volume for receiving and throwing grain to a desired location.

19. The apparatus for moving particulate matter of claim 16, wherein the motor is an electric motor.

20. The apparatus for moving particulate matter of claim 16, further
25 including a chute disposed on the body for guiding the particulate matter in a direction.

21. The apparatus for moving particulate matter of claim 16, wherein the paddle assembly rotates between 350 rpm and 525 rpm.

22. The apparatus for moving particulate matter of claim 16, wherein the body is constructed from a plastic material.

23. The apparatus for moving particulate matter of claim 16, wherein the particulate matter is grain.